4.2.1.8 Socioeconomics

Preferred Alternative: No Action Alternative

Under this alternative, the existing storage facility would remain operational. No new employment or in-migration of workers would be required.

Regional Economy Characteristics. Total employment in the REA is projected to increase by about 1.3 percent annually between 1995 and 2000, reaching 322,000 in the latter year. Long-range projections indicate slower growth after the year 2000, when employment will increase by less than 1 percent annually and reach 446,300 in 2040. Unemployment in the REA was 9.1 percent in 1994 and is expected to remain at this level into the near future. Per capita income is projected to increase from approximately $18,996 in 1995 to $28,079 in 2040. Projections for the No Action Alternative are presented in Table L.1–10.

Population and Housing. Population in the ROI is projected to increase from approximately 384,700 in 1995 to 568,600 by 2040. The total number of housing units in the ROI is projected to increase from approximately 140,900 to 208,200 during the same period. Population and housing projections for the No Action Alternative are presented in Tables L.1–11 and L.1–12, respectively.

Community Services. Education, public safety, and health care characteristics are used to assess the level of community services in the Hanford ROI. School enrollments are projected to increase from 76,891 students in 1995 to 113,659 students by 2040. To maintain the current student-to-teacher ratio of 18.9:1, the number of teachers in the ROI would need to increase from 4,077 in 1995 to 6,023 in 2040. These projections are presented in Tables L.1–13 and L.1–14, respectively.

The projected numbers of sworn police officers and firefighters serving in ROI communities over the period 1995 to 2000 are shown in Tables L.1–15 and L.1–16, respectively. Under No Action, the number of sworn police officers is projected to increase from 503 in 1995 to 742 in 2040 to maintain the current service level of 1.6 officers per 1,000 persons. The number of firefighters in the ROI would need to increase from 1,544 in 1995 to 2,281 in 2040 to maintain the current level of service of 4.0 firefighters per 1,000 persons.

Hospital occupancy rates are based on current capacity. Hospital occupancy rates and the estimated number of practicing physicians serving the ROI population between 1995 and 2040 are presented in Tables L.1–17 and L.1–18, respectively. Hospital occupancy rates for the ROI are projected to increase from 51 percent in 1995 to 75 percent in 2040. To maintain the current physician-to-population ratio of 1.2 physicians per 1,000 persons, the total number of physicians in the ROI would need to increase from 472 in 1995 to 696 in 2040.

Local Transportation. The worker population at Hanford would not increase. Therefore, any increases in traffic or air traffic would be due to the projected growth in the area unrelated to DOE activities. [Text deleted.]

Upgrade Alternative

Upgrade Without Rocky Flats Environmental Technology Site Plutonium or Los Alamos National Laboratory Plutonium Subalternative

Modify Existing Fuels and Materials Examination Facility for Plutonium Storage

[Text deleted.] A total of 54 workers would be employed during peak construction of the modified facility. During the operational phase, 225 workers would be required. Projections indicate that there would be sufficient available labor in the REA to fill both direct and indirect jobs generated as a result of construction and all indirect jobs generated by operation of the modified facility. Some workers would in-migrate to fill a portion of the direct jobs generated during operations.

Regional Economy Characteristics. During peak construction, the project would add up to 108 (54 direct and 54 indirect) jobs to the regional economy. All of these new jobs would be filled by available labor force in the REA and unemployment would fall from the No Action level of 9.1 percent to 9.0 percent (Socio 1996a). Per capita income would remain virtually unchanged, increasing by much less than 1 percent over the No Action Alternative.

Operation of the facility without storage of RFETS or LANL material would generate a total of 759 jobs (225 direct and 534 indirect) in the REA. These additional jobs would reduce regional unemployment by much less than 1 percent from the No Action level. Per capita income would increase by much less than 1 percent in the year 2005, when the facility would become fully operational (Socio 1996a).

Population, Housing, and Community Services. During construction, all newly created jobs would be filled by the resident labor force. Therefore, there would be no change to the region's population, housing market, or demand for community services beyond the No Action projections. A small increase in population would occur during operation of the facility due to the in-migration of five workers. Accordingly, there would be an insignificant effect on the housing market and the demand for community services (Socio 1996a).

Local Transportation. During the peak construction period, 104 vehicle trips per day would be generated by workers involved in facility modification. This increase would not affect level of service on the road segments analyzed. During operations, the workers would generate 432 vehicles trips per day. This increase over the No Action level would not affect the level of service on the local road segments analyzed (Socio 1996a).

Construct New 200 West Area Facility for Plutonium Storage

Work force requirements for the construction and operation of the new Pu storage facility are the same as for modification of the FMEF. Therefore, the magnitude of socioeconomic impacts for this option would be the same as those discussed above for the FMEF.

Upgrade With All or Some Rocky Flats Environmental Technology Site Plutonium and Los Alamos National Laboratory Plutonium Subalternative

Modify Existing Fuels and Materials Examination Facility for Plutonium Storage

A peak of 77 workers would be employed to modify the facility to store all of the RFETS and LANL material. During the operational phase, 252 workers would be required. Projections indicate that there would be sufficient labor available in the REA to fill all direct and indirect jobs generated by construction and all indirect jobs generated by operation of the modified facility. Some workers would in-migrate to fill a portion of the direct jobs generated by operation.

Regional Economy Characteristics. During peak construction, the project would generate 154 jobs (77 direct and 77 indirect) in the regional economy. All of these new jobs would be filled by available labor within the REA. Unemployment would fall from the No Action level of 9.1 percent to 9.0 percent (Socio 1996a). Per capita income would remain virtually unchanged, increasing by much less than one percent over the No Action Alternative.

Operation of the facility would generate a total of 850 (252 direct and 598 indirect) jobs. Regional unemployment would be reduced slightly from the No Action projection of 9.1 percent to 8.9 percent. Per capita income would increase by much less than 1 percent (Socio 1996a).

Population, Housing, and Community Services. All jobs generated by construction would be filled by the resident labor force. Therefore, there would be no change to the region's population from the No Action projections. Accordingly, there would be minimal effects on the housing market or demand for community

services. A small increase in population would occur during operation of the facility due to the in-migration of eight workers. Such an increase would have an insignificant effect on the housing market and the demand for community services (Socio 1996a).

If only a portion of the RFETS or LANL materials were transferred to Hanford, between 225 and 252 workers would be required to operate the facility. The exact number of workers would depend on the amount of material that would actually reside at Hanford. The size of the construction workforce would be between 54 and 77 workers in the peak year of construction. Between 108 and 154 jobs (direct and indirect) would be generated during construction while between 759 and 850 jobs (direct and indirect) would be generated during operations. There would be no changes to the ROI population over the No Action projections during construction, but could be some in-migration during operations. In all cases, the socioeconomic impacts to the region would be slight.

Local Transportation. During the peak construction period, 148 vehicle trips per day would be generated by workers involved in facility modification. During operations, workers would generate 484 vehicle trips per day. These increases would not affect the level of service on the local road segments analyzed. (Socio 1996a).

Construct New 200 West Area Facility for Plutonium Storage

Workforce requirements for the construction and operation of the new Pu storage facility are the same as for the modification of the FMEF. Therefore, the magnitude of socioeconomic impacts for this option would be the same as those discussed above for the FMEF.

Consolidation Alternative

Construct New Plutonium Storage Facility

To consolidate storage of Pu that is currently stored at multiple DOE sites, a new storage facility would need to be constructed at Hanford. A few workers would in-migrate to fill a portion of the direct jobs created during the operation of the new facility.

Regional Economy Characteristics. Construction would involve over 1,000 workers on site and add a total of 2,129 jobs (1,064 direct and 1,065 indirect) to the REA during the peak period of activity, an increase of less than 1 percent over the No Action level. All of these jobs would be filled by available labor in the REA. Unemployment would drop from 9.1 percent to about 8.5 percent. Per capita income would increase by much less than 1 percent in the peak year of construction (Socio 1996a).

The operation of the facility would add a total of 1,495 jobs (443 direct and 1,052 indirect) to the regional economy, an increase of less than 1 percent over the No Action level. A small percentage of the direct workers would in-migrate to fill some specialized employment requirements. Operation workers would begin phasing in as construction nears completion. Unemployment would rise from 8.5 percent during peak construction to 8.7 percent during operation, but would remain lower than the No Action level of 9.1 percent. Per capita income would increase by much less than 1 percent over No Action (Socio 1996a).

Population, Housing, and Community Services. A small increase in population would occur during the operation phase due to the in-migration of 27 workers. Such an increase would have no effect on the housing sector and would have an insignificant effect on the demand for community services (Socio 1996a).

Local Transportation. During the peak construction period, workers would generate 2,043 vehicle trips per day. This increase would not affect the level of service on the local road segments analyzed. During operations, workers would generate 851 vehicles trips per day, and the increase to roadway traffic would be less than during construction (Socio 1996a).

Collocation Alternative

Construct New Plutonium and Highly Enriched Uranium Storage Facilities

Construction of new storage facilities would be required in order to store Pu and HEU at Hanford. Workers would in-migrate to fill some of the direct jobs created during operation of the new storage facility. Construction employment would reach 1,076 during the peak period of activity. Operations would require 572 workers.

Regional Economy Characteristics. Construction of the new facility would generate a total of 2,153 jobs (1,076 direct and 1,077 indirect) during the peak construction year. The resident available labor force would be sufficient to fill all of the direct and indirect jobs created during the construction phase. Total employment in the REA would increase by less than 1 percent. Unemployment would decrease from 9.1 percent to 8.5 percent. Per capita income would increase by much less than 1 percent in the peak construction year (Socio 1996a).

Operation of the facility would produce a total of over 1,930 new jobs (572 direct and 1,358 indirect) within the REA. A majority of direct jobs and all of the indirect jobs generated would be filled by the resident labor force. Total employment in the REA would increase by less than 1 percent in the year 2005, when the facility would become fully operational. Operation workers would begin phasing in as construction nears completion. Unemployment would rise from 8.5 percent during peak construction to 8.6 percent during operation, but would remain lower than the No Action level of 9.1 percent. Per capita income is projected to increase by less than 1 percent (Socio 1996a).

Population and Housing. A small number of workers are projected to in-migrate during the operation period. The population increase would be negligible, and projected housing vacancies would be sufficient to accommodate the incremental population increase (Socio 1996a).

Community Services. The additional population would slightly increase demand for some community services. Worker in-migration would lead to an increase in ROI school enrollment by approximately 35 students during operation. In order to maintain the No Action student-to-teacher ratio, the number of teachers would have to increase by one (Socio 1996a). [Text deleted.]

In order to maintain the No Action level of service, two firefighters would need to be hired during the operational period. No additional police would be required to maintain the No Action level of service during the operational period (Socio 1996a).

The small population change would have a negligible effect on health services, increasing hospital occupancy by much less than 1 percent. The number of physicians in the ROI would be sufficient to maintain the No Action level of service.

Local Transportation. During the peak construction period, workers would generate 2,066 vehicle trips per day. This increase would not affect the level of service on the road segments analyzed. During operations, workers would generate 1,098 vehicles trips per day and the increase in roadway traffic would be less than during construction (Socio 1996a).

Subalternative Not Including Strategic Reserve and Weapons Research and Development Materials

If strategic reserve and weapons R&D materials are not included in the storage requirements for Hanford, there would be a small reduction in worker requirements for construction and operation of the facility due to fewer workers being needed. Therefore, the socioeconomic effects would be less than under those alternatives that include storage of nonsurplus RFETS and LANL material for the Upgrade With All or Some RFETS and LANL Pu Subalternative, the Consolidation Alternative, and the Collocation Alternative. [Text deleted.]

Phaseout

Phaseout of the existing Pu storage facility at Hanford would result in the loss of 675 total jobs (200 direct and 475 indirect) in the REA. The total direct and indirect employment loss would be much less than a 1 percent reduction in the projected regional employment levels for the year 2005, when the phaseout would be implemented.

In the longer term, some unemployed workers may migrate out of the REA to seek new employment opportunities. Even if all of these workers were to leave the REA with their families, population would decrease by much less than 1 percent compared to No Action. The impact on housing and community services, including health care, education, and public safety would not be substantial. For example, there could be a slight increase in housing vacancies or a decline in new housing construction and also a small decrease in demand for educational and health services (for example, teachers and physicians). These minor impacts would be further reduced if the storage mission is phased out over more than 1 year.

Phaseout of the existing Pu storage facilities at Hanford would reduce the number of vehicle trips per day by 384. There would be no significant traffic impact to the local road network.